

## ABSTRACT

A lightning detection and data acquisition system. A plurality of remote programmable sensor is utilized to detect cloud to ground and IC lightning strikes. Analog representations of the lightning strikes are converted to digital signals. The digital signals are classified according to user changeable criteria. The classified digital signals are compressed and optionally decimated. The compressed information is transmitted to a central location where it is decompressed and used to correlate the location, magnitude, and travel path of the detected lightning strikes.